Research On Pbl Flipped Classroom In College English Teaching

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ABSTRACT. Under the influence of the information age, how to make good use of multimedia technology has become one of the common concerns of educators. Aiming at the practical problems that it is difficult to implement PBL (Project-based Learning) in traditional college English classrooms, this article discusses the effective application of the project-based teaching model based on "Flipped Classroom", thereby improving the effectiveness of PBL teaching method and solving traditional project-based teaching methods. Problems in teaching; It also explores the teaching environment, teaching design and the implementation of teaching activities, and tries to find the matching point between PBL and "Flipped Classroom" in order to provide new ideas for the "Flipped Classroom" teaching mode of PBL under the network environment.

KEYWORDS: Pbl, "flipped classroom", College english

1. Introduction

With the popularity of the Internet and the application of modern information technology in college English education, the "Flipped Classroom" teaching mode becomes feasible and becomes the general trend of classroom teaching mode [1-3]. The purpose is to stimulate students' interest in English learning, to train students' autonomous learning ability, and to truly improve their language practice ability. According to the research steps designed by teaching materials, teachers guide students to carry out inquiry learning, and expand the training of listening, speaking, reading and writing English from inside to outside the classroom. Combining the advantages of traditional teaching mode with the advantages of online teaching, students can concentrate on the classroom, and let students master classroom knowledge by discussing and analyzing with other students under the guidance of teachers.

In this paper, PBL(Project-based Learning) and "Flipped Classroom" for practical teaching are organically integrated in line with the trend of higher education teaching reform. PBL teaching method refers to student-centered teaching and problem-centered teaching [4]. Finding and solving problems run through the whole classroom, hiding knowledge in problems, and cultivating students' ability of inquiry and self-study. Make students deeply aware of the importance and practicality of college English courses. In addition, the ideological and political education of college English course is ingeniously combined with the teaching content, and the ideological and political education of the course is carried out in a subtle way, so as to realize the ideological and political education function of professional courses.

2. Overview of "Flipping Classroom" and Pbl

2.1 "Flipped Classroom"

"Flipping the classroom" is actually the flipping of the teaching process by teachers in carrying out teaching activities. Before carrying out classroom teaching, the teacher will make a good video for students to watch, so as to grasp the key points in this lesson. This mode breaks through the limitation of traditional class teaching, breaks through the limitation of time and space of education, and realizes the global sharing of curriculum resources and the sharing of the whole people, thus achieving the balance and quality of education. In the "Flipped Classroom", this teaching form has been subverted, knowledge transfer is completed after class with the help of information technology, and knowledge internalization is completed with the help of teachers and classmates in class, thus forming a "Flipped Classroom". Before class, you can independently use the learning resources provided by teachers in advance, and you can also get the relevant information you want through the network. In the classroom, you can actively explore the problems you encounter through interaction, communication and reflection, thus becoming a learner at your own

pace [5]. By collecting students' problem lists, teachers can understand students' learning situation and analyze students' difficult points in the learning process, so as to design problems to be solved in class.

2.2 Pbl

PBL was first proposed by Barrows, an American professor of neurology. PBL is a new teaching mode, which is based on practical problems and takes students as the main body [6]. Knowledge acquisition is a process in which learners realize meaning construction through interpersonal cooperation activities in certain situations. Different from the traditional subject-based teaching method, PBL emphasizes students' active learning instead of teachers' teaching in traditional teaching. It aims to guide students to solve complex, practical or real problems through teachers. Pay attention not only to the evaluation of learning results, but also to the evaluation of learning process, and truly realize the comprehensive evaluation mode of combining summative evaluation with formative evaluation, teacher evaluation with peer evaluation, individual evaluation with group evaluation.

3. Feasibility Analysis of Applying Pbl "Flipping Classroom" to College English Teaching

3.1 Theoretical Basis of Cognitive Psychology

Compared with short-term memory, long-term memory is more stable and has a longer storage time. Of course, the effect of this memory is not perfect. The process from short-term memory to long-term memory is called consolidation. In the "Flipped Classroom", advanced teaching techniques are also actively integrated, which deepens the communication between teachers and students and improves students' learning effect. Through students' cooperation to solve problems, the process of students' problem solving is the process of comprehensive application of subject knowledge and skills. In this process, students' autonomous learning ability and team cooperation ability can be improved [7]. Hiding teaching objectives in question strings. The expected teaching goal can be achieved through progressive problems and the high efficiency of "turning over the classroom". At present, in the new curriculum reform, the theory of multiple intelligences will change the teacher's evaluation mechanism for students. Besides academic achievements, it will pay more attention to the comprehensive evaluation of students' learning attitude, emotional experience, learning strategies and cultural awareness, which will improve students' learning enthusiasm at all levels.

3.2 Advantages of Pbl "Flipping Classroom"

According to the principle of "double masters" of "turning over the classroom", we analyze it from two aspects: the design of teachers' teaching process and the design of students' learning process. At present, the mixed mode of online learning and individualized guidance has been adopted, and the resources of micro-lessons and video lessons based on the key knowledge and skills of textbooks can make students who are ill or participate in activities not be left behind. In the process of teaching activities, teachers can effectively integrate these resources, which can greatly enrich the classroom teaching content. PBL is based on questions, which requires students to explore the answers to questions independently. Some students may have the problem that time utilization is not compact. Teachers are required to change the traditional lecture teaching method of full house irrigation; Attach importance to cultivating students' practical English application ability and autonomous learning ability; Teachers can give appropriate encouragement and spur to these students when they implement a "Flipped Classroom" teaching activity.

Through "turning over the classroom", various extracurricular activities can be realized to increase opportunities and interests in learning English. Extracurricular activities, because of their relaxed and lively form, make it easier for more students to realize the beauty and interest of English, and a sense of accomplishment in learning English will also arise. And the use of "Flipped Classroom" in college English teaching can not only improve students' interest in learning, but also help teachers relieve teaching pressure and improve teaching effect. Before class, learners can learn independently and fragmentarily by means of various mobile terminal devices anytime and anywhere. In this process, various project teams have realized the diversity of classroom teaching activities through colorful project reporting methods [8]. Combining PBL with "Flipped Classroom", teachers can give learning task lists and ask questions when assigning pre-class learning tasks, which can not only cultivate students' autonomous learning ability and teamwork ability, but also enhance the interaction and communication between teachers and students, students and students.

4. Organic Combination of Pbl Teaching and College English "Flipping Classroom"

4.1 The Relationship between Pbl Teaching and "Flipping Class"

By combing the related theories of project-based teaching and "Flipping Classroom", we find that both of them are in agreement with each other from the inside. The "two-subject and three-stage" of "Flipping Classroom" emphasizes the principle of taking teachers as the leading factor and students as the main body. According to the design of teaching content, students are asked appropriate learning questions. These questions are the main line of students' autonomous learning, so the design of questions should be reasonable and promoted layer by layer. "Flipping the classroom" has changed from simple teacher explanation to teacher-student interaction. Students can freely ask teachers questions, express their opinions, and ask teachers for help or ask other students for help in time. This way not only promotes students' understanding and mastery of knowledge, but also helps to improve students' oral expression and thinking ability. Combining PBL teaching method with "Flipped Classroom" effectively will play a greater role in promoting the development of teachers and students. It is based on "problem-solving" interactive collaborative learning between teachers and students, and between students. Teachers get immediate feedback and immediate guidance in the teaching process. It is an efficient classroom combining "Flipped Classroom" with PBL teaching method [9].

As we all know, Chinese students often lack a certain language environment and opportunities for language practice when learning English. However, in actual teaching, they often only pay attention to the study of sentence patterns and phrases, ignoring the specific application. Therefore, in the "Flipped Classroom" teaching, students can accumulate a large amount of materials by mastering certain language knowledge before class, so that they can ask questions to teachers in classroom learning, and finally realize interaction and communication. In class, students display the results of the project, discuss and communicate with teachers and classmates, so as to check for gaps and fill gaps, so as to deepen cognition; It is beneficial to cultivate students' critical thinking and innovative thinking, and improve their communication skills. Then the teacher makes a final summary and comment on each group and its members.

4.2 Reconstruction and Development of Teaching Resources Based on Pbl

According to the connotation of PBL and the characteristics of the course, teachers integrate and design the knowledge points in the course, and reconstruct the interrelated projects which contain the core knowledge points. In the process of English learning, students can form positive emotional experience, autonomous learning ability and cross-cultural awareness. For example, whether the design of the question is scientific and reasonable, whether it reaches the cognitive development area of students but does not exceed the nearest development area, whether students have enough time to study by themselves after class, and so on. According to the class size and task needs, 4-5 people will be divided into a group through group cooperation. Teachers are no longer the keynote speakers on the podium, but the instructors around the students, the instructors and helpers of students' learning. At the same time, students can adjust their learning progress according to their actual learning ability, which also helps students realize personalized learning. Students can enter the simulation situation and complete a specific learning task in the process of interacting with computers, so as to better cultivate students' English expression ability and communicative ability in the process of PBL teaching implementation.

Whether PBL teaching mode or "Flipped Classroom" teaching mode, their teaching links have something in common: teachers provide learners with some counseling resources before class, which can be text, pictures, audio, animation, video and other materials. Learners have the activities of autonomous learning and group cooperative learning. Project courseware can integrate learning content, learning tasks, micro-videos, etc., and be vividly displayed in the form of presentations according to the teaching order. In the process of discussion, students may find new problems, which inspires teachers and students to make use of their after-school time to study this problem and give full play to the advantages of PBL teaching method and "flipping classroom". According to the implementation process of "Flipping Classroom", the teaching process is divided into two stages: knowledge learning before class and knowledge internalization in class. Help students to make a flexible learning plan according to their own learning characteristics, learning methods and learning situations, so as to improve students' learning efficiency and lay a good start for classroom teaching.

4.3 English Curriculum Design Scheme Based on Pbl "Flipped Classroom" Mode

Construction requirements and characteristics based on "Flipped Classroom" and PBL teaching method. The construction of PBL teaching in the "Flipped Classroom" mode is divided into three parts. That is, the construction of pre-class resource database and the self-study stage of students before class, the stage of classroom problem solving and knowledge internalization, and the stage of feedback and evaluation of problems after class. See fig. 1 for details.
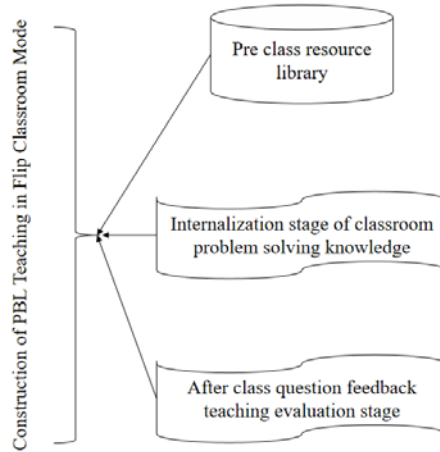
Fig.1 Construction of Pbl Teaching under the Mode of "Flipping Classroom"

4.3.1 Pre-Class Resource Design

Teachers should define teaching objectives and teaching effects, and develop pre-class teaching resources according to teaching contents and students' characteristics, including PPT, video, audio and other teaching forms. Select a group to report the knowledge learned before class and PBL task list topics in PPT form. Teachers and other students ask questions, and members in the group answer the questions. Among them, the important feature of pre-class knowledge learning stage is that students are mainly self-taught, and the important feature of in-class knowledge internalization stage is that teachers guide students to learn; The form of group discussion encourages students to show their learning achievements boldly, give full play to their subjective status, and let them become the real masters of the classroom.

In class, the teacher asked the students to do several multiple-choice questions in 5 minutes to understand the students' mastery of basic knowledge. Next, the teacher will spend 5 minutes to 10 minutes to solve the problems in students' pre-class study, and then the remaining 35 minutes will be used for students to do experiments related to topics in groups, and the teacher will give targeted guidance in the process. According to the general structure of "Flipped Classroom", the instructional design process of "Flipped Classroom" is shown in Figure 1 below:
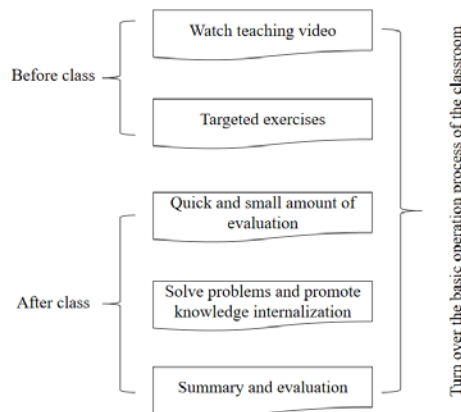

Fig.2 The Basic Operation Process of "Flipping Classroom"

Secondly, in-class exercises can check whether students master knowledge points, such as the network open classes of some famous schools, so as to realize resource sharing. In the stage of classroom teaching organization, the "Flipped Classroom" combined with project-based teaching is mainly presented by project reporting. In this process, the colorful project reporting methods of each project team have realized the diversity of classroom teaching activities.

4.3.2 In Class

Teachers give individual guidance and answer questions about different problems encountered by learners before

class. If students' problems focus on a certain knowledge point, teachers can give concentrated explanation and guidance. In this way, the time of self-study before class is effectively controlled, and the completion of practice in class is consolidated, and the problem of schoolwork burden is naturally solved. Under the influence of this learning model, the roles of teachers and students have changed accordingly. Teachers no longer occupy the main body in the classroom. Students can also raise their own problems, discuss with other students, and learn this content well under the guidance of teachers. In the process of team cooperation to complete the project tasks, the team leader shall be freely selected, and the team leader shall divide the tasks and formulate the project completion plan according to the specialties of the team members. In this way, if students can get immediate answers and help when learning before class, further discussion in class can enhance students' learning effect.

4.3.3 Study after Class

In the "after-school" session, teachers and students make two-way evaluation, teachers reflect on teaching through students' feedback, and set learning steps according to their own situation, which can be carried out collectively by project groups or independently. After learning the project courseware provided by teachers, the presentation mode of the project will be determined according to the learning tasks. For some students with weak self-discipline, how to improve the effect of autonomous learning is a problem to be solved. Teachers issue learning task sheets before class, indicating students' autonomous learning content, learning difficulties and learning goals. Learners use homework after class to consolidate their practice and deepen their impression of problem solving before and during class. At the same time, learners can still use the collaborative communication platform provided by teachers to communicate, or interact with teachers to promote the internalization of knowledge.

5. Conclusion

Implementing PBL-based "Flipped Classroom" teaching mode in college English course can stimulate students' interest in exploration and motivation to learn, cultivate students' innovative thinking, and improve students' ability to find, raise and solve problems. The application of PBL-based "Flipped Classroom" teaching mode in college English courses has broken away from the single "demonstration-practice" teaching mode in traditional skill courses, enriched the teaching forms of college English courses, and is an innovation of classroom teaching mode in the information technology era. However, PBL "Flipped Classroom" is a new teaching organization model. To make this new model more effectively applied in practice, it is necessary for the majority of front-line college English teachers to constantly explore and summarize, and gradually improve all aspects of "Flipped Classroom" teaching in teaching practice, so as to improve students' learning initiative and promote their college English learning.

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